



U.S. Department
of Transportation
Federal Highway
Administration


Memorandum

Subject: **INFORMATION:** Guidance on Preliminary
Engineering Authorizations in FMIS

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From: 
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In Reply
Refer to: HIPA-10

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To: Division Administrators
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The Federal Highway Administration (FHWA) requires States to provide program and project specific information about the Federal-aid highway program in its Fiscal Management Information System (FMIS). To ensure information on Federal-aid investments is useful, it is vital that States and division offices report valid, accurate, and reliable data in FMIS.

A review of preliminary engineering projects authorized in 2014 showed a majority of these projects appeared to be appropriately characterized as preliminary engineering. The remaining projects did not appear to be correctly coded as preliminary engineering and indicate a need for clearer guidance.

While this guidance is intended to improve the consistency of preliminary engineering authorizations in FMIS, it also addresses properly authorizing other types of projects.

What is preliminary engineering?

Preliminary engineering is the location, design, and related work preparatory to the advancement of a project to physical construction. Preliminary engineering includes preliminary and final design, both defined in [23 CFR 636.103](#), and other project-related

work leading to physical construction. This includes costs to perform studies needed to address requirements of the National Environmental Policy Act (NEPA) and other environmental laws. It may include advertising and other pre-award work such as bid analysis, although it is also acceptable to include this work as construction engineering costs.

Projects and activities that do not directly prepare a project to advance to physical construction are not preliminary engineering and should not be coded as such for the improvement type or the effective authorization date in FMIS. Examples of projects that have sometimes been incorrectly coded as preliminary engineering include NBI bridge inspections; workforce development; safety education programs; inventory and condition studies; feasibility studies conducted prior to NEPA to determine if and when a project should begin project development; and other planning activities.

What provision of Title 23 makes preliminary engineering eligible for Federal funding?

Preliminary engineering is eligible for Federal funding as it is incidental to “construction” which is defined in [23 U.S.C. 101\(a\)\(4\)](#). The definition of “construction” includes:

(A) preliminary engineering, engineering, and design-related services directly relating to the construction of a highway project, including engineering, design, project development and management, construction project management and inspection, surveying, mapping (including the establishment of temporary and permanent geodetic control in accordance with specifications of the National Oceanic and Atmospheric Administration), and architectural-related services;

The above listed activities that occur before construction are preliminary engineering. Those that occur during construction are construction engineering.

What phases in FMIS are used to establish the effective date?

An Effective Authorization Date for each phase of work being authorized is needed to execute a project agreement in FMIS. The effective date for that phase generally does not change over the life of the project. However, if new phases are added to the project, each will have its own effective authorization date. FMIS 4.0 has six phases, which will be reduced to five with FMIS 5.0. The five phases in FMIS 5.0 will be:

- PE (Preliminary Engineering),
- ROW (Right-Of-Way),
- Construction,
- SPR (State Planning and Research), and
- Other.

What activities and projects should be coded as preliminary engineering in FMIS?

Code those activities and projects listed in [23 U.S.C. 101\(a\)\(4\)\(A\)](#) that occur before construction with the FMIS improvement type “15: Preliminary Engineering” and the “PE” effective authorization date.

Code those activities and projects listed in [23 U.S.C. 101\(a\)\(4\)\(A\)](#) that occur during construction with the FMIS improvement type “17: Construction Engineering” and the “Construction” effective authorization date. See the attached table for coding projects with consultant contracts that include both preliminary and construction engineering.

The “PE” and the “ROW” effective authorization date fields should be used only in conjunction with the FMIS improvement type “15: Preliminary Engineering” or “17: Right of Way.” If another improvement type is being used, one of the other effective authorization date fields should be used.

The table also provides examples of work activities depicting proper FMIS coding. The full list of improvement types will be included in the FMIS 5.0 User’s Manual.

Why is it important to code preliminary engineering correctly in FMIS?

Preliminary engineering projects are subject to the provisions of [23 U.S.C. 102\(b\)](#) and the implementing regulations at [23 CFR 630.112\(c\)\(2\)](#) that require States to repay such costs if right-of-way or construction has not been initiated within 10 years of authorization of preliminary engineering. When preliminary engineering activities are not properly authorized with the appropriate authorization date and improvement type, administration and compliance with these provisions represent a significant challenge. If other costs are authorized as preliminary engineering, they may appear to be subject to the repayment provision even though they should not be.

When should divisions begin using this guidance? Is it necessary to recode previous project agreements for preliminary engineering?

Effective immediately, divisions should use this guidance when authorizing new project agreements in FMIS 4.0 and FMIS 5.0. Existing project agreements should not be modified to reflect this guidance.

Who is the contact for more information?

If you have any questions, please contact David Bartz at 512-536-5906 or Peter Kleskovic at 202-366-4652. For FMIS questions contact FMISTEAM@dot.gov.

Attachment

Table: Improvement Type and Effective Authorization Date Coding Examples

Project Categories	Improvement Type¹	Effective Authorization Date Field
Location, design, and related work preparatory to the advancement of a project to physical construction, including preliminary and final design, NEPA, and project specific studies and alternative analyses.	15 - Preliminary Engineering	PE
Preliminary engineering elements included in a design/build or other innovative construction contract package	Appropriate Construction related code.	Construction ²
Design related activities that occur during construction of a traditional Design-Bid-Build project (e.g., change-order revised plan development by the PE design consultant or another consultant	15 - Preliminary Engineering, if work is included in PE contract.	PE
	17 - Construction Engineering, if not included in PE contract.	Construction
Asset Management and Performance Management	44- Other	Other
NBIS and NTIS inspection and training ³	49 or 55 as appropriate	Other
Travel Demand Management projects, carpools, vanpool, rideshare programs that are not for a specific physical construction project	24 – Traffic Management/ Engineering - HOV	Other
Strategic Highway Safety Plans, safety awareness and education, and other safety activities that do not involve physical construction	21 – Safety	Other
	38 – Safety and Education for Pedestrians/Bicyclists	
Summer Transportation Institutes, Construction Career Expos, DBE and OJT Supportive Services	42- Training	Other
Motorist assistance programs, CARS-511, Traffic Operation Center operations	24 – Traffic Management/ Engineering - HOV	Other
Ferry boat projects, auto or pedestrian, including terminal facilities and approaches, eligible under 23 USC 129(c)	26 – Ferry Boats	Construction or Other ⁴
Workforce development and training	42- Training	Other
Assistance to Affected State and Federal Agencies Associated with Environmental Streamlining Activities under 23 USC 139(j)	20 – Environmental Only	Other
Feasibility Studies (longer term implementation horizon and more general, less defined corridor, including financial decision to proceed with development of project and set schedule)	18 - Planning	SP&R, if applicable fund source, or Other
System planning work regardless of funding category used, including SP&R, PL, and STP	18- Planning	SP&R, if applicable fund source, or Other
Research	19 - Research	SP&R, if applicable fund source, or Other
Develop guides or manuals, purchase equipment or software ⁴		Other, if eligible.

¹ Improvement type examples are provided. More applicable improvement types may be available.

² State may elect to code effective date and improvement type as PE if design elements are clearly delineated in the contract price proposal and the costs are invoiced accordingly.

³ See Financial Management Information System (FMIS) New and Updated Improvement Type Codes for Bridges, Tunnels and Other Assets memo dated 9/27/2012 from M. Myint Lwin.

⁴ Development of guides or manuals or purchase of equipment and software are generally not eligible except as part of an indirect cost pool. See State Administration of the Federal-Aid Program (Direct Versus Indirect Costs) memo dated 9/22/2011 from David A. Nicol. If specifically authorized by statute or regulation, then project should be authorized as "Other".